Puget Sound Partnership
Draft Outline for Question 3 "What do we need to restore and protect Puget Sound"
Leadership Council Discussion Draft – 10-19-08

Introduction

Using the goals and outcomes that define a healthy Puget Sound (Action Agenda Question 1) and the current condition of Puget Sound and the relative magnitude of the threats (Action Agenda Question 2), we can set out a scientifically grounded, strategic Sound-wide road map of the programs, policies, and projects needed to protect and restore Puget Sound by 2020 (Action Agenda Question 3).

This handout is the framework for Question 3. It starts with the ecosystem principles identified earlier this year and then lays out the four strategic priorities and associated high-level objectives to address the key threats of habitat alteration and loss and pollution. The four priority strategies as a whole address the major threats to ecosystem health and embrace a new approach to the Puget Sound ecosystem.

A. **Protect** the intact ecosystem processes, structures, and function that sustain Puget Sound. Avoiding problems before they occur is the best and most cost-effective approach to ecosystem health, and it is essential to prevent the further loss of high-value processes that form them before they slip away.

B. **Restore** the ecosystem processes, structures, and functions that sustain Puget Sound. Protecting what we have left will not be sufficient with significant effort to undue past damage.

D. **Prevent water pollution at its source.** Many of our efforts have focused on cleaning up past damage, but insufficient resources have been devoted to stopping pollutants before they reach our rivers, beaches and species.

C. **Work together** as a coordinated system to ensure that activities and funding are focused on the most urgent and important problems facing the region. Our current management system is fragmented and not set up to solve problems and manage at the ecosystem scale.

At the Leadership Council meeting, we will review the Question 3 framework in detail. The objectives in Question 3 are the synthesis of the work of the topic forums, input from Ecosystem Coordination Board, and the many meetings in the Action Areas, as well as comments received over the last year.

Using the framework, we will then discuss potential Partnership Initiatives that flow from the strategic priorities. The initiatives are intended to be an important implementation action that gives significant lift to an immediate need and/or a first step for a long-term solution. An updated initiatives list that matches the Question 3 framework will be available at the meeting. It will build on the handout discussed by the Ecosystem Coordination Board earlier this month.

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Guiding Principles for Ecosystem Management in Puget Sound

The following principles were used to develop the strategic priorities and will be used to evaluate specific strategies and actions for inclusion in and consistency with the Action Agenda. The principles were developed through input from the topic forums and action area meetings with refinements from the Leadership Council, Science Panel, and Ecosystem Coordination Board.

a. Address threats and choose opportunities with the highest potential magnitude of impact.
b. Address threats with the highest level of urgency. (How imminent is the threat; will it result in an irreversible loss, how resilient are the resources that are affected?)
c. Use strategies that have a reasonable certainty of effectiveness and reflect a balanced precautionary and adaptive approach.
    - Actions should have a realistic expectation that they will be effective in addressing the identified threat.
    - Actions and decisions about the use of resources should err on the side of caution to avoid irreversible ecological consequences.
    - Actions should be designed so that they can be measured, monitored, and adapted.
d. Use scientific input – about the importance, urgency, and reversibility of threats; opportunities for management impact; effectiveness of actions; and monitoring and adaptation – in designing, implementing, and evaluating strategies.
e. Use strategies that are cost effective in making efficient use of funding, personnel and resources.
f. Address the processes that form and sustain ecosystems rather than focusing narrowly on fixing individual sites.
g. Attempt to address threats at their origin instead of reacting after the damage has been done. Anticipate and prevent problems before they occur. (With more people coming to the region and a changing climate, a proactive strategy is increasingly important.)
h. Consider the linkages and interactions among strategies.
    - Address multiple threats and their interactions with strategies that work together. We cannot afford to look at problems or develop solutions in isolation.
    - Watch out for unintended consequences. Evaluate strategies so that actions to address one problem do not cause harm to other ecosystem functions and resources.
    - Integrate salmon recovery actions with ecosystem management actions.
i. Account for the variations in ecosystem conditions and processes in different geographic areas of Puget Sound. Parts of Puget Sound are fairly intact while others are severely degraded, and rebuilding strategies need flexibility to encompass regional differences. Ensure that no region or economic sector bears the entire brunt of the responsibility for implementing solutions.
j. Invest in scientific exploration of problems and solutions, as well as taking restorative actions. We do not yet fully understand all causes, scale and scope, of problems or how to most effectively and efficiently restore Puget Sound. A better understanding of how natural and social systems interact and respond to stressors will lead to more effective solutions.

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A. Priority A: Protect Intact Ecosystem Processes, Structure, and Function

A.1 Permanently protect the intact areas where marine, marine nearshore, estuary, freshwater rivers and floodplains, and upland processes, structures, and functions are still intact

A.1.1 *Use permanent protection designations for high value habitat that is vulnerable to conversion to maintain land cover and habitat and reduce land conversion rates.*

A.1.2 *Update and implement regulatory programs related to growth and shoreline protections to increase protection at an ecosystem scale.*

A.2 Protect and conserve water flows to increase and sustain water availability for instream and human uses

A.2.1 *Reform state water laws to be more protective of instream flows and encourage conservation*

A.2.2 *Implement and update stream flow protection and enhancement programs.*

A.2.3 *Implement Washington Department of Health's Water Use Efficiency Rule.*

A.2.4 *Expand opportunities to reuse, reclaim, and recycle water resources*

A.3 Protect and support long-term stewardship of working farms, forests, and aquatic lands consistent with the Action Agenda to help maintain ecosystem function and improve viability of rural communities.

A.3.1 *Use, expand and promote financial incentives that allow working lands to stay viable*.

A.3.2 *Use, expand, promote, and coordinate existing landowner stewardship programs and focus efforts on ecosystem priorities.*

A.3.3 *Promote economically viable farms and agriculture that are protective of watershed health*

A.3.4 *Promote economically viable, healthy working industrial and small forests that are protective of watershed health*

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A.3.5 *Promote working aquatic lands that are protective of ecosystem health to provide abundant shellfish for commercial, subsistence, and recreational harvest.*

A.4 Rapidly respond to the introduction of new invasive species

A.4.1 *Implement key Puget Sound related recommendations that will prevent the introduction of new invasive species as identified in the Invasive Species Council "Invaders at the Gate" Strategic Plan.*

A.4.2 *Restrict ballast water discharges in Puget Sound as first step in preventing introduction of new invasive species.*

B. Priority B: Restore Ecosystem Processes, Structures, and Functions

B.1 Implement and maintain priority ecosystem restoration projects for marine, marine nearshore, estuary, freshwater riparian and uplands.

B.1.1 *For the near-term, immediately implement high priority projects identified in existing processes. These* include salmon recovery three-year work plans, road decommissioning plans, and other documented and well-vetted processes.

B.1.2 *Over the long-term, implement projects identified through the watershed assessment and harmonization of existing efforts identified in Priority A.*

B.2 Complete efforts that help inform and refine restoration priorities to improve regional ability to strategically identify and implement restoration projects

B.2.1 *Accelerate the completion of the Puget Sound Nearshore Restoration Partnership's General Investigation*.

B.2.2 *Develop a region-wide program to remove fish passage barriers building on existing efforts*.

B.3 Revitalize waterfront communities to increase the ability of ports to grow and market themselves as "green" and livability of urban areas.

B.3.1 *Implement a green ports strategy*

B.3.2 *Improve the coordination of waterfront restoration and clean up efforts.*

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B.3.3 *Prioritize habitat restoration at clean up sites where the probability of recreating ecosystem function is high.*

B.4 Implement stewardship incentives to increase private landowners ability to undertake restoration projects.

B.4.1 *See recommendations in Section A for working lands*

B.4.2 *Implement incentives for industrial and commercial landowners*

C. Priority C: Reduce the Sources of Water Pollution

C.1 Prevent pollutants from being introduced in the Puget Sound ecosystem to decrease the loadings from toxics, nutrients and pathogens.

C.1.1 *Implement a prioritized, comprehensive chemical management program to reduce loading into Puget Sound.*

C.1.2 *Implement targeted programs to reduce pollution from marine vessels, land-based transportation, and air emissions*

C.1.3 *Develop and implement water quality clean up and management plans to reduce pollutant loads.*

C.2 Use comprehensive, integrated approach to managing urban stormwater and rural surface water runoff to reduce stormwater volumes and pollutant loadings.

C.2.1 *Integrate efforts to manage stormwater discharges with work to protect land cover and reduce pollutants at the watershed scale and across Puget Sound.*

C.2.2 *Manage stormwater runoff in urban and urbanizing areas to reduce stormwater related impacts.*

C.2.3 *Manage surface water run-off in rural areas and on working resource lands to reduce pollutant loadings*

C.3 Prioritize upgrades and manage wastewater treatment plants to reduce nutrient and pathogen loading.

C.3.1 *Require tertiary or Class A wastewater treatment to reduce nutrient loadings in nutrient sensitive areas of Puget Sound*

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C.3.2 *Implement priority upgrades of wastewater treatment facilities to reduce nutrient and pathogen loading.*

C.3.3 *Use innovative treatment plants in urbanizing areas to increase effectiveness of treatment and efficiency of actions*.

C.3.4 *Align State Public Works Trust Fund and Revolving Trust Fund projects with the Action Agenda priorities*

C.4 Establish and maintain locally-based coordinated and effective on-site and septic system management to strategically and systematically reduce nutrient and pathogen loading

C.4.1 *Establish, in each county, a coordinated way to systematically identify and replace failing or poorly functioning septic and on-site treatment systems, and maintain septic systems.*

C.4.2 *Provide innovative cost-share and loan programs for homeowners who need them.*

C.5 Prioritize and implement remediation and clean up projects to reduce pollutants and use funding effectively.

C.5.1 *Prioritize and implement clean up projects.*

C.5.2 *Prioritize removal of creosote log pilings and loose logs based on estimated contribution of logs to overall loadings at specific sites starting in priority clean up areas.*

C.6 Continue to monitor swimming beaches as well as conduct shellfish and fish advisory programs to reduce human exposure to health hazards

C.6.1 *Maintain ability to respond to harmful algae blooms and other natural conditions that can be harmful to human health*

C.6.2 *Maintain human health monitoring of swimming beaches.*

D. <u>Priority D: Work effectively and efficiently together as a system on priority needs</u>

D.1 Use the Action Agenda as the strategic, ecosystem framework for action in Puget Sound to improve regional effectiveness in achieving ecosystem outcomes.

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D.2 Develop and implement a coordinated and prioritized long-term strategy for population and economic growth, ecosystem protection and restoration, and a changing climate to improve overall effectiveness of the strategies to protect the ecosystem and reduce pollution.

D.2.1 *Build on existing efforts to create and implement a sound-wide vision for accommodating population and economic growth while protecting Puget Sound to increase coordination and efficiency and protection of ecosystem goals.*

D.2.2 *Develop and implement consistent sound-wide decision-making framework for protecting and restoring ecosystem processes and functions.*

D.2.3 *Perform watershed-scale assessments to refine and improve prioritization of areas for growth, protection, and restoration to improve effectiveness and efficiency of efforts.*

D.2.4 *Integrate and harmonize existing sound-wide and local plans and programs to improve efficiency and effectiveness in addressing Action Agenda priorities.*

D.2.5 *Support, develop, and integrate climate change programs and adaptation strategies into the Action Agenda to improve effectiveness of implementation and regional and local readiness for anticipated changes.*

D.3 Build and sustain long-term capacity of local partnerships to effectively and efficiently implement the Action Agenda.

D.3.1 *Increase and improve the ability of collaborative groups and processes to implement priority work and resolve trade-offs and conflicting needs.*

D.3.2 *Increase the ability of cities, counties, and special districts to provide coordinated local technical assistance to landowners, homeowners, and businesses on priority needs*

D.3.3 *Engage the state agencies to increase focus on implementation of Action Agenda priorities and improve collaboration*

D.3.4 *Engage Puget Sound tribes to increase focus on implementation of Action Agenda priorities and improve collaboration while respecting sovereign status.*

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D.3.5 *Engage the federal government to increase implementation of the Action Agenda.*

D.3.6 *Expand outreach to and collaboration with the business and development community to improve problem solving and support for protection and restoration efforts.*

D.3.7 *Expand access to and rates of landowner participation in voluntary incentive programs to improve the ability of private landowners to protect and restore ecosystem processes.*

D.3.8 *Share knowledge and expertise across jurisdictional boundaries to improve effectiveness and avoid duplication of effort.*

D.3.9 *Use excellent customer service when working with private landowners and businesses to improve effectiveness and compliance.*

D.3.10 *Grow and use the Puget Sound non-profit entity to increase education and outreach efforts*.

D.3.11 *Work cooperatively with Canada on management and scientific investigations to increase collaborative problem solving and information sharing.*

D.4 Reform the environmental regulatory system to protect habitat at an ecosystem scale

D.4.1 *Align federal, state, and local agency regulatory programs in Puget Sound to improve coordination, efficiency, and effectiveness of implementation.*

D.4.2 *Streamline and coordinate the environmental permit review process to improve the consistency of decisions.*

D.4.3 *Increase the success rate of mitigation projects to achieve no-net loss standards.*

D.5 Improve compliance with rules and regulations to increase the likelihood of achieving ecosystem outcomes.

D.5.1 *Integrate environmental regulation and permit field compliance across federal, state, and local jurisdictions to improve efficiency of implementation and effectiveness of achieving environmental outcomes.*

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D.5.2 *Provide financial and technical assistance for cities and counties to conduct and improve compliance monitoring*.

D.5.3 *Provide funding and authority for state agencies to implement environmental regulations.*

D.5.4 *Develop and implement water use compliance programs in each basin to improve the availability of water for people and instream uses.*

D.5.5 *Train designers and contractors who work in the marine and freshwater nearshore areas on desired outcomes, best management practices and rules.*

D.6 Use biodiversity, ecological, and economic perspectives when making decisions about harvest, human production of resources, and human disturbance of species to improve the sustainability of resources for human and natural system needs.

D.6.1 *Implement priority actions of the State Biodiversity report.*

D.6.2 *Implement existing species conservation plans while a more integrated planning approach is created*.

D.6.3 *Conduct future species conservation planning from an ecosystem perspective and do multi-species planning as much as possible.*

D.6.4 *Set harvest targets and regimes based on ecosystem needs, including the economic and natural system.*

D.6.5 *Implement the priority recommendations of the Hatchery Scientific Review Group*

D.7 Provide sufficient, stable funding and ensure funding is focused on priority actions to increase efficiency and effectiveness.

D.7.1 *Focus existing Puget Sound spending on Action Agenda priorities to increase efficiency.*

D.7.2 *Provide additional funding to increase our ability to address priority prevention, restoration, and clean up needs.*

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D.7.3 *Use innovative funding methods, including market-based approaches to increase diversity of funding mechanisms and engagement of private sector interests.*

D.8 Increase and sustain coordinated efforts for communication, outreach, and education to increase public awareness and encourage individual stewardship.

D.8.1 *Implement a long-term, highly visible communications effort to increase public understanding of the threats facing Puget Sound and engagement in reducing personal impact.*

D.8.2 *Coordinate and unify Puget Sound related public information programs improve consistency of messages with the Action Agenda and efficiency.*

D.8.3 *Expand and sustain local volunteer steward and educators programs focused on Action Agenda priorities to increase participation rates and improve efficiency of communication efforts.*

D.8.4 *Strengthen K-12 environmental programs to improve long-term understanding of Puget Sound issues and solutions. This effort will build on and tie into existing efforts.*

D.9 Implement a focused, well-balanced science program that improves regional capacity to understand the ecosystem, threats to it, and the effectiveness of our actions, as well support decision-making with scientific information.

D.9.1 *Develop and maintain an open, peer-reviewed, and responsive capacity to meet the scientific needs of the Partnership*

D.9.2 *Develop and use an ongoing integrated ecosystem assessment for Puget Sound to improve our ability to determine what is healthy and to evaluate implementation strategies.*

D.9.3 *Develop and implement a coordinated, prioritized, and integrated ecosystem monitoring, modeling, and research program*

D.10 Build and use a performance management system to improve accountability for on-the-ground results in the ecosystem and implementation of actions

D.10.1 *Build and use a coordinated adaptive management system so that the Partnership and implementers can modify and adjust efforts.*

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D.10.2 *Develop and implement an accountability system for Puget Sound implementers.*

D.10.3 *Develop and implement a shared Puget Sound information management system.*

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